		H'A
	Application No.	Applicant(s)
Notice of Allowability	10/717,080	LIEBERMAN ET AL.
	Examiner	Art Unit
	Arnel C. Lavarias	2872
The MAILING DATE of this communication appeal all claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commeting the	n this application. If not included unication will be mailed in due course. THIS
1. This communication is responsive to <u>8/3/05</u> .		
2. \boxtimes The allowed claim(s) is/are <u>7-8,19-27 (renumbered 1-11)</u> .		
3. \boxtimes The drawings filed on $\underline{11/10/04,11/19/03}$ are accepted by	the Examiner.	
 4. Acknowledgment is made of a claim for foreign priority una) a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	e been received. e been received in Applicati	on No
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give		
 CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner' Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in to 7. DEPOSIT OF and/or INFORMATION about the deposit of participation of the processing participation of the process of the process of the participation of the process of the participation of the participat	son's Patent Drawing Revie 's Amendment / Comment of 1.84(c)) should be written on the the header according to 37 C	the drawings in the front (not the back) of FR 1.121(d).
attached Examiner's comment regarding REQUIREMENT		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5 Notice of I	oformal Potent Application (PTO 153)
 □ Notice of References Cited (PTO-092) □ Notice of Draftperson's Patent Drawing Review (PTO-948) 	<u> </u>	offormal Patent Application (PTO-152) Summary (PTO-413),
Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date	Paper No. 08), 7. 🗌 Examiner's	/Mail Date Amendment/Comment
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. ⊠ Examiner's 9. □ Other	THONG NGUYEN PRIMARY EXAMINER GROUP 2800

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DETAILED ACTION

Response to Amendment

- 1. The amendments to Claims 7-8, 19-20 in the submission dated 8/3/05 are acknowledged and accepted.
- 2. The cancellation of Claims 1-6, 17-18 in the submission dated 8/3/05 is acknowledged and accepted.
- 3. In view of the amendments above, the rejections of Claims 1-6, 17-18 in Sections 8-10 of the Office Action dated 2/4/05 are respectfully withdrawn.

Allowable Subject Matter

4. Claims 7-8, 19-27 are allowed.

REASONS FOR ALLOWANCE

5. The following is an examiner's statement of reasons for allowance:

Claim 7 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an optical fiber having at least one parameter that varies from an input end to an output thereof in a manner to maintain constant power loss per unit length over the length of the fiber, as generally set forth in Claim 7, and further wherein the one parameter comprises the core/cladding refractive index ratio.

Claim 8 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an optical fiber having at least one parameter that varies from an input end to an output thereof in a manner to maintain constant power loss per unit length over the length of the fiber, as generally set forth in Claim 8, and further wherein the one parameter comprises an increase in the absorption coefficient of the fiber from the input end to the output end.

Claim 19 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an optical fiber having at least one parameter that varies from an input end to an output end in a way calculated to make the power loss vary in a controlled way over the length of the fiber, as generally set forth in Claim 19, and further wherein the one parameter comprises the core/cladding refractive index ratio.

Claim 20 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest an optical fiber having at least one parameter that varies from an input end to an output end in a way calculated to make the power loss vary in a controlled way over the length of the fiber, as generally set forth in Claim 20, and further wherein the one parameter comprises an increase in the scattering coefficient of the fiber from the input end to the output end.

Claim 21 is allowable over the cited art of record for at least the reason that the cited art of record fails to teach or reasonably suggest a distributed fiber optic sensor comprising a multi-mode fiber, as generally set forth in Claim 21, the fiber including at least one parameter that varies as a function of position within the fiber to compensate for

any non-linear power loss over the length of the fiber. Claims 22-27 are dependent on Claim 21, and hence are allowable for at least the same reasons Claim 21 is allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 9:30 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arnel C. Lavarias

8/10/05